## Deployment, Installation, Back-Out, and Rollback Guide

**Medical Care Collection Fund (MCCF) Electronic Data Interchange (EDI) Transaction Applications Suite (TAS)**

## Phase 2 eInsurance IB\*2.0\*652



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**Office of Information and Technology (OI&T)**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| October 2019 | 1.0 | Initial Version (IOC Entry) | REDACTED |
| November 2019 | 1.1 | IOC Exit | REDACTED |
| December 2019 | 1.2 | IOC Exit – updated link associated with footnote from section 3.1 Timeline | REDACTED |

# Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all of these activities. Its purpose is to provide clients, stakeholders, and support personnel a smooth transition to the new product or software. This document should be structured to reflect the application of these procedures to either a single site or to multiple sites.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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# Introduction

This document describes how to deploy and install the IB\*2.0\*652 patch and how to back-out the product and rollback to a previous version or data set.

## Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom IB\*2.0\*652 will be deployed and installed, as well as how the patches are to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

## Dependencies

The following patches must be installed **before** IB\*2.0\*652:

* IB\*2.0\*519
* IB\*2.0\*582

## Constraints

This patch is intended for a fully patched VistA system.

# Roles and Responsibilities

**Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Team** | **Phase / Role** | **Tasks** | **Project Phase (See Schedule)** |
| 1 | VA OI&T, VA OI&T  Health Product Support & PMO | Deployment | Plan and schedule deployment (including orchestration with vendors) | Planning |
| 2 | Local VAMC and CPAC processes | Deployment | Determine and document the roles and responsibilities of those involved in the deployment. | Planning |
| 3 | Field Testing (Initial Operating Capability (IOC)), Health Product Support Testing & VIP Release Agent Approval | Deployment | Test for operational readiness | Testing |
| 4 | Health Product Support and Field Operations | Deployment | Execute deployment | Deployment |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Team** | **Phase / Role** | **Tasks** | **Project Phase (See Schedule)** |
| 5 | Individual Veterans Affairs Medical Centers (VAMCs) | Installation | Plan and schedule installation | Deployment |
| 6 | VIP Release Agent | Installation | Ensure authority to operate and that certificate authority security documentation is in place | Deployment |
| 7 | N/A for this patch as we are using only the existing VistA system | Installation | Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes | N/A |
| 8 | VA’s eBusiness team | Installation | Coordinate training | Deployment |
| 9 | VIP release Agent, Health Product Support & the development team | Back-out | Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out) | Deployment |
| 10 | No changes to current process – we are using the existing VistA system | Post Deployment | Hardware, Software and System Support | Warranty |

# Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

## Timeline

The deployment and installation is scheduled to run for 14 days, as depicted in the master deployment schedule1.

## Site Readiness Assessment

This section discusses the locations that will receive the IB\*2.0\*652 deployment.

### Deployment Topology (Targeted Architecture)

This patch IB\*2.0\*652 is to be nationally released to all VAMCs.

1 Project schedule (right click and select open hyperlink to access)

**REDACTED**

### Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

* + - * REDACTED

Upon national release all VAMCs are expected to install this patch within the compliance dates.

If your site is a production account ***and you are not a VAMC with patient insurance on file*** … (i.e. HAC) you must wait until after 1/31/20 to install the patch in your production account. If you CAN NOT wait then please log a National Ticket and ask for a input file for IB\*2.0\*652 identifying what your site number is and why you are asking for this.

If you are a test account and you are not the real IOC test site and you are prompted for a path when installing this patch you have two options. (1 or 2 development accounts may hit this scenario.) Option a, wait until after 1/31/20 to install the patch in your account. Option b, log a National Ticket and ask for a input file for IB\*2.0\*652 identifying what your site number is and why you are asking for this. Make sure to tell them you are not the real IOC site #xyz.

### Site Preparation

The following table describes preparation required by the site prior to deployment.

**Table 2: Site Preparation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Site/Other** | **Problem/Change Needed** | **Features to Adapt/Modify to New Product** | **Actions/Steps** | **Owner** |
| N/A | N/A | N/A | N/A | N/A |

## Resources

### Facility Specifics

The following table lists facility-specific features required for deployment.

**Table 3: Facility-Specific Features**

|  |  |  |  |
| --- | --- | --- | --- |
| **Site** | **Space/Room** | **Features Needed** | **Other** |
| N/A | N/A | N/A | N/A |

### Hardware

The following table describes hardware specifications required at each site prior to deployment.

**Table 4: Hardware Specifications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Required Hardware** | **Model** | **Version** | **Configuration** | **Manufacturer** | **Other** |
| Existing VistA system | N/A | N/A | N/A | N/A | N/A |

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

### Software

The following table describes software specifications required at each site prior to deployment.

**Table 5: Software Specifications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Required Software** | **Make** | **Version** | **Configuration** | **Manufacturer** | **Other** |
| Fully patched Integrated Billing package within VistA | N/A | 2.0 | N/A | N/A | N/A |
| IB\*2\*519 | N/A | Nationally released version | N/A | N/A | N/A |
| IB\*2\*582 | N/A | Nationally released version | N/A | N/A | N/A |

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

### Communications

The sites that are participating in field testing (IOC) will use the “Patch Tracking” message in Outlook to communicate with the eBusiness eInsurance sub-team, the developers, and product support personnel.

#### Deployment/Installation/Back-Out Checklist

The Release Management team will deploy the patch IB\*2.0\*652, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their VistA production systems. Therefore, this information does not need to be manually tracked in the chart below.

**Table 6: Deployment/Installation/Back-Out Checklist**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Day** | **Time** | **Individual who completed task** |
| Deploy | N/A | N/A | N/A |
| Install | N/A | N/A | N/A |
| Back-Out | N/A | N/A | N/A |

# Installation

## Pre-installation and System Requirements

IB\*2.0\*652, a patch to the existing VistA Integrated Billing 2.0 package, is installable on a fully patched M(UMPS) VistA system and operates on top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, providing Integrated Billing independence from variations in hardware and operating system.

This patch IB\*2.0\*652, requires an input file for any VAMC production account with patient insurance information. Refer to the patch description which can be found in your PackMan message or on the National Patch Module (NPM) for specific directions on where to get the file, what file to pull, and where to upload the results file created by the installation of this patch. This patch does not follow a typical installation process as it requires an input file.

## Platform Installation and Preparation

Refer to the IB\*2.0\*652 documentation on the NPM on Forum for the detailed installation instructions. These instructions will include any pre installation steps if applicable.

## Download and Extract Files

Refer to the IB\*2.0\*652 documentation on the NPM to find the location of related documentation that can be downloaded. IB\*2.0\*652 will be transmitted via a PackMan message and can be pulled from the NPM. It is not a host file, and therefore does not need to be downloaded separately.

If you are a production account of a Veterans Administration Medical Center (VAMC) which maintains patient insurance information in VistA, refer to the patch description regarding an input file that must be downloaded prior to installing this patch.

## Database Creation

IB\*2.0\*652 does modify the data in the VistA database for many Medicare policies that are on file as a result of the input file that this patch requires for production accounts. In addition, two new fields have been created as part of the INSURANCE TYPE sub-file (#2.312) of the PATIENT (#2) file. These two new fields are: SUBSCRIBER ID ROLLBACK (#7.03) and PATIENT ID ROLLBACK (#7.04).

## Installation Scripts

No installation scripts are needed for IB\*2.0\*652 installation.

## Cron Scripts

No Cron scripts are needed for IB\*2.0\*652 installation.

## Access Requirements and Skills Needed for the Installation

The following staff need access to the PackMan message containing the IB\*2.0\*652 patch or Forum’s NPM in order to download the nationally released IB\*2.0\*652 patch. The software is to be installed by the sites or regions designated: VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, and/or VistA Applications Division2.

If you are installing this patch in a production account of a VAMC which maintains patient insurance information in VistA, you must have access to the Secure File Transfer Protocol (SFTP) site referenced in the patch description in order to download your input file and upload your exception results file.

## Installation Procedure

Refer to the IB\*2.0\*652 documentation on the NPM for the detailed installation instructions.

## Installation Verification Procedure

Refer to the IB\*2.0\*652 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

## System Configuration

No system configuration changes are required for this patch.

## Database Tuning

No reconfiguration of the VistA database, memory allocations or other resources is necessary.

# Back-Out Procedure

Back-Out pertains to a return to the last known valid instance of operational software and platform settings.

## Back-Out Strategy

Although it is unlikely, due to care in collecting, elaborating, and designing approved user stories, followed by multiple testing stages (Developer Unit Testing, Component Integration Testing, SQA Testing, and User Acceptance Testing), a back-out decision due to major issues with this patch could occur during site Mirror Testing, Site Production Testing or after National Release to the field (VAMCs). The best strategy is dependent on the stage during which the decision is made.

2 “Enterprise service lines, VAD” for short. Formerly known as the IRM (Information Resources Management) or IT support.

If during Mirror testing or Site Production Testing, a new version of a defect correcting test patch is produced, retested and successfully passes development team testing, it would be resubmitted to the site for testing. If the patch produced catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

If the defect(s) were not discovered until after national release but during the designated support period, a new patch will be entered into the National Patch Module on Forum and go through all the necessary milestone reviews etc., as a patch for a patch. It is up to VA OI&T and product support whether this new patch would be defined as an emergency patch or not. This new patch could be used to address specific issues pertaining to the original patch or could be used to restore the build components to their original pre-patch condition.

After the support period, the VistA Maintenance Program would produce the new patch, either to correct the defective components or to back-out the patch.

## Back-Out Considerations

It is necessary to determine if a wholesale back-out of the patch IB\*2.0\*652 is needed or if a better course of action is to correct through a new version of the patch (if prior to national release) or through a subsequent patch aimed at specific areas modified or affected by the original patch (after national release). A wholesale back-out of the patch will still require a new version (if prior to national release) or a subsequent patch (after national release). If the back-out is post-release of this patch IB\*2.0\*652, this patch should be assigned status of “Entered in Error” in Forum’s NPM.

### Load Testing

N/A. The back-out process if necessary is executed at normal, rather than raised job priority, and is expected to have no significant effect on total system performance. Subsequent to the reversion, the performance demands on the system would be unchanged.

### User Acceptance Testing

* + - 1. Centers for Medicare & Medicaid Services (CMS) claims require the new Medicare Beneficiary Identifiers (MBI) after December 31, 2019. Health Insurance Claims Numbers (HICN) will no longer be acceptable on the claims after this date. This patch performs a one-time processing of an input file in order to upload the MBI values to Medicare policies which do not already have the MBI numbers on file.
      2. The INSURANCE COMPANY ENTRY/EDIT [IBCN INSURANCE CO EDIT] option was modified so that the user have the ability to add a new Group Plan without the need to assign a subscriber.
      3. A new Security Key (IBCN PT POLICY COMNT DELETE) has been added to allow users the ability to delete one or more patient policy comments regardless of who or when the comment was entered.

## Back-Out Criteria

The project is canceled or the requested changes implemented by IB\*2.0\*652 are no longer desired by VA OI&T and the eBusiness eInsurance sub-team, or the patch produces catastrophic problems.

## Back-Out Risks

Since the eInsurance software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

## Authority for Back-Out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA Financial Service Center (FSC) or Health Care Clearing House.

eInsurance is tightly integrated with these external partners and a back-out of the patch should not be a standalone decision.

## Back-Out Procedure

The back-out plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

Back-Out Procedure prior to National Release. If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that development team can quickly address via a new software version. If the site is unsure who to contact they may log a ticket of contact Health Product Support - Management Systems Team.

The IB\*2.0\*652 patch contains the following build components.

* Data Dictionary
* Enhancements
* Protocols
* Routines
* Security Keys

While the VistA installation procedure of the KIDS build allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, due to the complexity of this patch, it is not recommended for back-out, and a restore from a backup of the Transport Global should not be attempted. In the event that a site decides to back out this patch, the site should contact the National Service Desk (NSD) to submit a help desk ticket. The development team will need to issue a follow-on patch in order to comprehensively back-out this patch and/or to clean up corrupted data/remove data dictionary changes, if needed and restore the system to a functioning state.

Please contact the EPMO team for assistance since this installed patch contains components in addition to routines.

## Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully installed.

# Rollback Procedure

Rollback pertains to data. The data changes in this patch are specific to updating patient Medicare policies by adding the patient’s appropriate MBI number as a result of processing the sites input file upon patch installation. Rolling back the data on the patient’s insurance records would result in the rejection of any claims to CMS starting January 1, 2020 that are associated with a policy that had the data rolled-back.

Therefore, rolling back the data is not an option. The data would have to be corrected with a new or updated patch rather than removing the MBI and restoring the previous values. Refer to the Back-out sections in this document on correcting a defect.

## Rollback Considerations

Not applicable.

## Rollback Criteria

Not applicable.

## Rollback Risks

Not applicable.

## Authority for Rollback

Not applicable.

## Rollback Procedure

Not applicable.

## Rollback Verification Procedure

Not applicable.

### Template Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| March 2016 | 2.2 | Changed the title from Installation, Back- Out, and Rollback Guide to Deployment and Installation Guide, with the understanding that Back-Out and  Rollback belong with Installation. | VIP Team |
| February 2016 | 2.1 | Changed title from Installation, Back-Out, and Rollback Plan to Installation, Back- Out, and Rollback Guide as  recommended by OI&T Documentation Standards Committee | OI&T Documentation Standards Committee |
| December 2015 | 2.0 | The OI&T Documentation Standards Committee merged the existing *“Installation, Back-Out, Rollback Plan”* template with the content requirements in the OI&T End-user Documentation  Standards for a more comprehensive Installation Plan. | OI&T Documentation Standards Committee |
| February 2015 | 1.0 | Initial Draft | Lifecycle and Release  Management |